

# **Cedar River Instream Flow Commission**

## ***Final Minutes***

### **SPU Water Quality Lab**

March 5<sup>th</sup>, 2013

#### **Organizations/Members Present:**

- Seattle Public Utilities -- Tom Fox, Rand Little, Karl Burton
  - Seattle City Light – Liz Ablow
  - Washington Department of Fish and Wildlife -- Peggy Miller
  - NOAA Fisheries --Randy McIntosh
  - US Fish and Wildlife Service -- Tim Romanski
  - Army Corps of Engineers -- Ken Brettmann, Chris Behrens, Scott Pozarycki, Peg Marcus, Marian Valentine
  - Washington Department of Ecology -- Toni Smith
  - Muckleshoot Indian Tribe -- Holly Coccoli
  - Guest: Frank Urabeck (Member of Public)
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- I. Call to Order:** Tom called the meeting to order at 9:45 AM.
- II. Approval of Agenda:** Approved as presented.
- III. Approval of Draft Minutes:** Conference call minutes for January and February were approved as presented and finalized. Rand asked whether there were any further comments regarding December's minutes. December's minutes were finalized without changes.
- IV. News and Notes:** Tom mentioned that local governments and DOE met one month ago to discuss drought conditions. At that time, snowpack was at 50% of normal for that time of year. It was decided that any action on the dry conditions should be held off for one month, at which time the group would reconvene. Currently, snowpack is near normal and the recent storm has provided unusually large volumes of rain for the month of March. Concerns have changed from questions about drought declaration to worries regarding flood control.
- V. Real Time Water Management:**

***Hydrologic Conditions:*** Tom reported that current snowpack is 98-100% of median levels and water supply conditions are favorable for summer water

supply. The Cedar River Basin has slightly less snow than the Tolt but the Tolt measurements may be reading high based on recent site checks. Precipitation for the month of February was much higher than normal. Since the beginning of March, there has been over 10" of rain and flows at Renton reached 2,400 cfs yesterday. Releases were dropped by 500 cfs as the most recent rainstorm approached but downramping rates prevented further decreases until today when SPU will decrease releases by an additional 90 cfs. In February, estimated unregulated flows and actual flows were similar for the 1<sup>st</sup> third of the month. In the middle of the month, estimated unregulated flows exceeded actual flows as SPU tried to maintain the reservoir at 1552. The last third of the month experienced flows that were higher than estimated unregulated flows as operations were made to release water to increase the size of the flood pocket for anticipated storms.

On February 25<sup>th</sup>, 2014, during a Masonry Dam downramp there was a downramping violation. At the tail end of a 7.5 hour downramp, the downramp rate exceeded the 1"/hr rate in four 15-minute increments by 0.1-0.8 inches/hr. In the last hour of the downramp the river flows dropped below the critical flow of 80 cfs which is when the 1"/hr downramp rate is implemented. As explained to the IFC, the operator took the appropriate steps to calculate what the flow would be once the downramp was complete using the tools he had, which include the flow meter at the dam and the compliance gage that measures river flow. His calculations determined the entire downramp would stay above 80 CFS. This did not take into consideration the inaccuracies of both the gage and the flow meter. New language will be adopted that will take into consideration the transition from above to below 80 cfs during a downramp. The IFC agreed that this is a compliance issue but because of the time of year and the fact that downstream, below the powerhouse, flows were above the critical flow for downramping, fish were at no greater risk during the downramp. All other downramps during the past month were in compliance with required downramping rates.

Consumption over the last month was approximately 100 MGD, which is very close to last year's level. Cumulative diversion was also very similar to last year and well below compliance levels for the Seattle – Muckleshoot Agreement.

**Lake Washington:** Ken reported that the Corps began refill on February 15<sup>th</sup> when the lake elevation was 20.5'. The Corps expects the lake to be at 22' (full) by late May or early June depending on runoff.

**Weather:** The recent weather has been unusually wet for the beginning of March. Another storm is expected tonight followed by more rain over the weekend. Snow level will vary between 4,000 and 6,000 feet through Sunday. The rain is not expected to cause large floods and although Monday and Tuesday next week are supposed to be dryer, it is likely that the reservoir will

go above 1557' causing involuntary spill through the service spillway (notch). It is difficult to predict how high flows will go because that is contingent on the amount of rain we receive in the next few days. Tom said he hoped that involuntary spill will occur after the inflows below the dam begin to recede. Tom predicts instream flows of between 2,000 and 2,500 cfs over the weekend but, if rain volumes come in higher than forecast, it could be even higher.

***Fish Update:*** Karl reported that flows over the last month had only gone below 530 cfs during two short periods where flows decreased to 491 and 525 cfs, respectively. Using the stage discharge relationship at the gage below the diversion (USGS 12117600) and recent redd depth measurements, Karl predicted that 8 redds would have had the top of their redd mounds slightly exposed (5 redds  $\frac{1}{4}$ " exposed, 2 redds 1 and  $\frac{1}{4}$ " exposed and 1 redd  $\frac{3}{4}$ " exposed). Karl reminded the group that the surface area for exposure is very small compared to the size of the redd and the chances that alevins would be trapped in such a small area that is slightly dewatered, seem very small. In each instance, flows exceeded 530 cfs soon after these redds experienced slight dewatering.

Rand mentioned that Kelly will attempt to keep trapping fish during the elevated flows unless debris prevents her crews from trap operation.

***Army Corps Challenge Grant Discussion:*** Scott and Chris showed a Power Point presentation detailing the need for replacement of the Stoney Gate valves at the locks. Since injuries to juvenile fish from passage through the valves and pipes has been documented, the Corps have used a strategy of slowly filling the locks combined with barnacle removal in the pipes every spring. The presentation also included a request to partner with Seattle in design development for the valve replacement project. The Corps proposed that the City use some of the funding in the HCP for water conservation at the locks to fund \$400K to the Corps so their engineers can produce the design. In the proposal, the Corps will provide \$100K to administer the design project. After the design is complete, the Corps will then use the design in its requests to the US Congress for funding to build the project.

Tim asked how the IFC would recover the funding if the project was not built. Marian answered that there is no mechanism for recovering the funding and, if construction of the valve replacements did not receive funding, the IFC would not receive any money back. Marian added, that, although there were no guarantees the project would be built, the likelihood that construction would move forward would be bolstered by the partnership, and having the design complete and in hand when the request to Congress is made. Rand mentioned that there have been previous examples of Seattle providing funding through the HCP to help implement successful fish protection projects at the Locks, such as the construction of smolt flumes. Karl reminded the IFC that the available funding in the HCP for locks water conservation could be transferred

(with party approval) to fund other projects that would be beneficial to Lk. Washington Basin biotic resources without the risks of the Stoney Gate valve design project. Peggy asked whether the Corps would provide the results of the fish studies that indicated there was a problem with the valves and Scott agreed to present that information at the next IFC meeting.

## **VI. Supplemental Studies:**

### **Peak Flow Adaptive Management Study Phase II**

Topic 1 – Sockeye Redd Scour Verification Study. Karl mentioned that the recent 2,400 cfs event had exceeded the target flow to test the new scour threshold (2,200 cfs). Karl talked with Andy Gendaszek and they agreed that the accelerometers should be removed this summer. Karl will contact the Washington Conservation Corps to check on their availability to help with extracting the arrays from the substrate.

Topic 2 – Off Channel Habitat Inventory and Peak Flow Assessment  
Rand mentioned that he had recently been contacted by King County who voiced interest in the off channel study results. County staff think that these results may be transferrable to one of their projects on the Cedar. The County is requesting a meeting to investigate the possibility that the IFC off channel data sets may be useful in their efforts on the Cedar. The IFC agreed that a meeting should take place. Rand mentioned that the timelines for the respective projects may be a problem since the County indicated the data may be needed soon.

Topic 3 – Rand reported that he, Karl and Liz had attended a meeting with USGS staff (Chris Konrad, Chris Magirl, Andy Gendaszek and Mark Munn) to discuss sampling strategies for the River Succession Peak Flow Monitoring in the two mile reach below Cedar Grove Bridge. Chris Konrad provided meeting notes which were distributed to the IFC. The notes provided additional detail on the work to be completed in the next two years. The next step for USGS on Topic 3 will be to provide proposed metrics for tracking succession in the 2-mile study reach along with rationale for each metric.

## **VII. April 2<sup>nd</sup> IFC Meeting:**

- 1) Corps presentation of historical information regarding the effects of the Stoney Gate valves on Lk. Washington salmonid survival.

## **VIII. Meeting adjourned at 12:05 PM**